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23735 7590 04/21/2009 DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008				
EXAMINER				
STANLEY, MARK P				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/797,920

Applicant(s)

LEVY, KENNETH L.

Examiner

MARK P. STANLEY

Art Unit

2427

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7-11,13-18 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-11 and 13-18, 25-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant argues that the tag of Roese only has one state being that the 'tag indicates that the packets should not be accessed if found outside a specified location. However, the Examiner respectfully disagrees, as Applicant does not clearly define the role of the distributor in the claim limitations, mainly Applicant does not differentiate whether the distributor may or may not be the same entity as that of the first destination address and whether the user may be the distributor and the user provisions the entertainment content to a first destination address such as a home personal computer via actual use of the home personal computer; therefore specifically regarding claim 4, the Examiner reads Roese in the case as described above. Further, the tag of Roese does convey two states both being claimed by the applicant, a first state being whether it may be transmitted to any second destination address different from the first destination address when the domain is only that of the first destination address entity, and a second state being conveying whether it is not permissible to transmit the data to a second destination address except within a domain that includes the first destination.

Applicant argues that enforcement as intended by an originator does not occur at a proper location being a first physical location upon. However the Examiner respectfully disagrees, the enforcement occurs when determined to be at a location outside the domain. Thus, when an attempt at transmission from a first location is outside of the domain, the first location enforces the restriction. Further examiner notes

that re-transmission is read as simply transmitting a copy of the data a second time, and the originator is the first location.

Applicant argues that the tag of Roese can not be practiced with a 'single-bit flag'. However the Examiner respectfully disagrees, the claimed limitation states 'one or more single-bit flags', thus while the tag of Roese may or may not be practice with one 'single-bit flag' the tag would be possible through the use of multiple single-bit flags.

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 11, 14, 15, and 18 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. While the claims recite a series of steps or acts to be performed, a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing (Reference the May 15, 2008 memorandum issued by Deputy Commissioner for Patent Examining Policy, John J. Love, titled "Clarification of 'Processes' under 35 U.S.C. 101"). The instant claims neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 4, 7-9, 11, and 13-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Roesse et al. (US 2003/0217122 A1 hereinafter Roesse).

Regarding claim 4, Roesse discloses “a method of providing entertainment content from a distributor to a home, while governing potential redistribution of the content from the home, the method including forming an IP packet having header data and body data, wherein the body data includes content data, and the header data includes a first destination address within the home to which the distributor intends the content data be delivered, the method comprising:

the distributor forming said header data to additionally include additional data specifying whether it is permissible to send a copy of the content data in the packet to a second destination address different than the first destination address, wherein the additional data has at least two states, respectively indicating: ([0115]-[0117], a tag is used for generating a packet with additional data for placing transmission restrictions as described above)

(a) it is not permissible to send a copy of the content data in the packet to any second destination address; or" ([0115], Fig. 1, where paragraph [0115] of Roesse states 'defined boundaries (e.g., a present device, a room, ...' where the tag incorporates both states being that the tag may prohibit transmissions to certain destinations or prohibit transmissions to any destination that is outside present device meaning transmissions to any location from the present device is prohibited)

"(b) it is not permissible to send a copy of the content data in the packet to any second destination address except to a second destination address within a domain that also includes the first destination address" ([0115]-[0118], Fig. 6, describes preventing the data from being sent to any other destination, [0117] describes selectively preventing data from being sent to any destination outside of a set domain, [0115] describes a device may not transmit data to any other destination outside a domain, where no device may be authorized to receive the content no matter the device location).

"wherein said domain comprises networked devices associated with a single family, and restriction on the potential redistribution of the content is defined by reference to the intended first address" ([0115], any devices that belong to a single entity such as a campus regardless of who uses the devices belonging to the single entity constitutes as a domain of network devices associated with a single family where the restrictions on the exchanging the content may be limited to within the domain of the single family such as any network devices within a campus)

Regarding claim 7, Roesse discloses “the method of claim 4 wherein a device associated with the first destination address has a first physical location and a device associated with the second destination address has a second physical location, and the additional data includes a field signaling that copying of data in said packet to said second destination address should be:

(a) permitted if the second physical location is physically proximate to the first physical location; and

(b) prohibited if the second physical location is physically remote from the first physical location” ([0100]-[0103] describes the location limitation being a physical location limitation)

Regarding claim 8, Roesse discloses “the method of claim 7 wherein the first and second destination addresses are within a common domain” ([0100]-[0103], Fig. 1, Fig. 8, where the first and second destination devices can be within a common domain).

Regarding claim 9, Roesse discloses “the method of claim 7 wherein the first and second destination addresses both correspond to network devices associated with a single family” ([0100]-[0103], Fig. 1, Fig. 8, network devices allowed within the network may be limited to a single family).

Regarding claim 11, Roesse discloses “a method of data processing that includes receiving an IP packet having header data and body data, wherein the header

data includes a first destination address, the first destination address corresponding to a device at a first physical location where delivery of the packet was intended by an originator thereof, the body data comprising content data, the method comprising – at said first physical location - interpreting additional data in the header of said packet as specifying whether it is permissible to re-transmit a copy of data in the packet – after receipt thereof at the first destination address - to a second destination address, wherein:” (Roese teaches both generating an IP packet with additional data conveying restriction information at a first device location, Fig. 1 item 104, as described in claim 4 above, and receiving and analyzing the generated IP packet at a second device location, Fig. 1 item 114, such as a firewall as described in the response to arguments above. Where at the second device it is determined as stated in paragraph 117 “if the data is going to be routed in the next hop to a location that is outside the permitted location(s)” thus the destination of the packet determined in the packet header is analyzed for determining hops and enforcing restrictions on the packet)

“(a) if the additional data has a first state, prohibiting re-transmission of a copy of the content data in the packet to any second destination address; and” ([0115]-[0117], the packet received at the second device determines according to the additional data that the packet is in a first state being that it is prohibited from any transmission outside the first device and the second device accordingly prohibits further transmission)

“(b) if the additional data has a second state, prohibiting re-transmission of a copy of data in the packet to any second destination address other than a second destination address within a domain that also includes the first destination address”

([0115]-[0117], when the second device receives the packet and determines according to the additional data that the packet is in a second state being that transmission is allowed but also prohibited from transmission to devices not within a set region, the second device will accordingly prohibit further transmission when it is determined the next hop for the packet to be routed to is not a physical location within a specified region, where the destination of the packet determined in the packet header is a determining factor in the hops).

Regarding claim 13, the claim is rejected for the same reasons as claim 4 above.

Regarding claim 14-16, the claim is rejected for the same reasons as claims 7-9 above, respectively.

Regarding claim 17, Roese discloses "the method of claim 14 wherein the method includes determining whether the second physical location is physically remote from the first physically location by reference to whether the second destination address is served by a common firewall with the first destination address ([0098] describes combining the use of a firewall with the physical locations of the devices, where it states a firewall makes determination of packets into and out of a network).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 10, 18, 25-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese et al. (US 2003/0217122 A1 hereinafter Roese) in view of Levy (US 2001/0044899 hereinafter '899).

Regarding claim 1, Roese discloses "a method of enforcing geographical restrictions on content redistribution in a TCP/IP network in which content is distributed in packet form, each packet including header data and content data, the header data comprising information about the packet and its payload, the method comprising the acts:

defining a geographical boundary across which certain content data does not pass, wherein said boundary is defined--at least in part--by a hardware firewall device" ([0098], [0115]-[0118], Fig. 6, where [0098] describes the use of firewalls with devices sending and receiving content information, [0117] describes preventing the data from being transmitted at the point of transmission or at the point of reception depending on assigned restrictions of the data).

"determining whether an IP packet should be regarded as conveying content that should not cross said boundary, by reference to one or more single-bit flags included in the header data of said packet" ([0115]-[0118], Fig. 6, where step 620 in Fig. 6 is where

data being transmitted is tagged with information about a boundary restriction, and [0116] describes the tagged information being conveyed in the data packets being transmitted such that a device receiving the packet may appropriately restrict the packet upon analyzing).

But, while Roese states that a system determines the location sensitivity of data to be transferred and placing additional data in a generated packet to identify restriction information at receiving devices ([0116]), Roese does not explicitly state placing the additional data as a packet header containing flag bits being "related to the payload of a watermark in the content". However, '899 discloses transmarking video entertainment data to preserve the use of a video entertainment data digital "watermark in the content" when modifying the signal of the video entertainment data including packetizing the video entertainment data ([0012]-[0013], [0015], [0019]).

'899 teaches that a watermark is first detected ([0022]) in an original embodiment of the data and information such as copy control parameters and content identifiers are extracted ([0023]). Subsequently, the detected watermark signal may or may not be removed ([0026]), and a second watermark is then added based on the first detected watermark ([0029]) where the second watermark is adapted to work in the intended environment ([0033]) such as a packet-based communication channel, where a packet header with information pertaining to a watermark payload in each packet is generated ([0035]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of '899 for preserving

watermarks of digital content during transmission in a packet-based communication channel via transmarking an initial digital watermark of the content into watermark payloads in each packet with additional data placed in each packet header based on the watermark payload with the teachings of Roese for modifying packets with additional data based on tags, such that the additional data may convey restriction information on the data in the packets for devices to determine whether to prohibit or allow transmission of packets. One would have been motivated to do so to provide restriction on content as intended free from malicious user intervention by referring to a payload of a watermark in the body data to determine the usage rules in a packet header, where Roese seeks to provide secure restriction on usage of content and a watermark securely provides restriction information hidden from a user.

Regarding claims 10 and 18, Roese teaches the method of claim 4 and 11 as described above, but Roese does not explicitly state "wherein said additional data is related to the payload of a watermark encoded in the body data". However, placing header information containing flag bits related to a watermark has been analyzed as in claim 1 above.

Regarding claims 25-26 and 28, Roese teaches the use of a tag for defining boundaries as described in paragraph 115, where paragraph 116 states "the server generating a data packet to transport the data over the network can add this tag while generating the data and/or packet", Roese states in paragraph 117 "a device within

system 100 and/or the data itself determines (step 625) whether the data is outside the permitted location(s)" and paragraph 98 teaches the device limiting the packet transmission in system 100 of Fig. 1 being a firewall, where paragraph 98 states "firewalls are primarily computer programs designed to analyze packets and, from that analysis, make a determination as to whether packet transmission into or out of the network is permitted". Therefore, data added to the packet based on the tag during generation of the packet includes the given additional data, where the firewall may analyze the body or header of the packet received, it is understood that both placing additional data in the header and/or the packet is taught such that the firewall has means to properly analyze the additional data of the packet to determine restrictions.

But, Roese does not explicitly state "extracting restriction information from header data conveyed with the video entertainment" or "discerning the restriction information by reference to data decoded from digital watermark information hidden within the video entertainment" and "including data indicating said ascertained restriction information in header portions of each of said IP packets".

However, '899 discloses transmarking video entertainment data to be preserve the use of a video entertainment data digital watermark when modifying the signal of the video entertainment data including packetizing the video entertainment data ([0012]-[0013], [0015],[0019]. '899 teaches that a watermark is first detected ([0022]) in an original embodiment of the data and information such as copy control parameters and content identifiers are extracted ([0023]). Subsequently, the detected watermark signal may or may not be removed ([0026]), and a second watermark is then added based on

the first detected watermark ([0029]) where the second watermark is adapted to work in the intended environment ([0033]) such as a packet-based communication channel, where a packet header with information pertaining to a watermark payload in each packet is generated ([0035]). Additionally, '899 discloses converting a header of the video entertainment data into a watermark ([0016]) such that a watermark payload and packet header pertain to the header of the video entertainment data.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of '899 for preserving watermark and header information of a video entertainment data by placing information pertaining to the watermark and header data into the packet header with the teachings of Roese for placing tag information into the header of the packet based on the data packetized to enforce geographical limitations on exchanging the data. One would have been motivated to do so to provide restriction on content as intended free from malicious user intervention by referring to a watermark in the data to determine the usage rules, where Roese seeks to provide secure restriction on usage of content and a watermark securely provides restriction information hidden from a user.

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roese et al. (US 2003/0217122 A1 hereinafter Roese) in view of Levy (US 2001/0044899 hereinafter '899) and in further view of Levy et al. (US 2002/0186844 hereinafter '844).

Regarding claim 27, Roese and '899 teach claim 25 as disclosed above, but do not explicitly teach obtaining restriction information from a remote repository. However,

'844 states the use of obtaining a content identifier from a video entertainment data digital watermark using the content identifier to retrieve usage restrictions imposed on the video entertainment data from an external database ([0025]-[0026], Fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of '844 for obtaining restriction information from a remote repository associated with the video entertainment data via a content identifier determined by the digital watermark with the teachings of Roese and '844 where restriction information based on data to be transmitted imposing geographical limitations is placed in the header of a packet. One would have been motivated to do so to further improved the teachings of '844 for using a digital watermark embedded in video entertainment data whereby accessing restriction information pertaining to the digital watermark that may not have been entirely contained within the digital watermark so as to provide a option of updating of the restriction information a remote database.

8. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roese et al. (US 2003/0217122 A1 hereinafter Roese) in view of Levy (US 2001/0044899 hereinafter '899), and in further view of Medvinsky et al. (US 2005/0071663 hereinafter Medvinsky).

Regarding claim 29, Roese and '899 teach the methods of claim 1 as described above, but do not explicitly state the use of a single bit flag. However, Medvinsky teaches the use of a Boolean flags which to represent DRM functions including a

Boolean flag representing whether it may be moved to another location that is an authorized domain ([0168]).

Therefore, it would have been obvious to combine the teachings of Roese and '899 for use of header data to enforce geographical restrictions on transmission of data with the teachings of Medvinsky for use of single-bit Boolean flags representing whether data may be transmitted to another location that is an authorized domain. One would have been motivated to use a single-bit flag in the header data to reduce data sizes of packets and lower computational power necessary to process the additional header data pertaining to geographical restriction.

9. Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roese et al. (US 2003/0217122 A1 hereinafter Roese) as applied to claims 4 and 11, and in view of Medvinsky et al. (US 2005/0071663 hereinafter Medvinsky).

Regarding claims 30-31, Roese teaches the methods of claims 4 and 11 as described above, but do not explicitly state the use of a single bit flag. However, Medvinsky teaches the use of a Boolean flags which to represent DRM functions including a Boolean flag representing whether it may be moved to another location that is an authorized domain ([0168]).

Therefore, it would have been obvious to combine the teachings of Roese for use of header data to enforce geographical restrictions on transmission of data with the teachings of Medvinsky for use of single-bit Boolean flags representing whether data may be transmitted to another location that is an authorized domain. One would have

been motivated to use a single-bit flag in the header data to reduce data sizes of packets and lower computational power necessary to process the additional header data pertaining to geographical restriction.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK P. STANLEY whose telephone number is (571)270-3757. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark P Stanley/
Examiner, Art Unit 2427

/Scott Beliveau/
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